

AMENDED IN SENATE MAY 20, 2002
AMENDED IN SENATE APRIL 17, 2002
AMENDED IN SENATE APRIL 3, 2002

SENATE BILL

No. 1525

Introduced by Senator Sher

February 20, 2002

An act to amend Sections 2118, 6431, and 15600 of, and to add Section 6431.5 to, the Fish and Game Code, relating to transgenic species, and making an appropriation therefor.

LEGISLATIVE COUNSEL'S DIGEST

SB 1525, as amended, Sher. Transgenic species.

(1) Existing law makes it unlawful to import, transport, possess, or release alive into this state certain species of wild animals, except under a permit.

This bill, in addition, would make it unlawful to import, transport, possess, or release alive into this state any live transgenic fish, or the roe thereof, except under a permit. The bill would define "transgenic fish," for this purpose, to mean a *genetically engineered* fish that has been altered at the molecular or cellular level by one of several specified means.

(2) The existing Aquatic Nuisance Species Prevention and Control Act, until January 1, 2004, requires the Department of Fish and Game to adopt prescribed guidelines as the policy of this state in order to prevent the introduction and spread of aquatic nuisance species into any river, estuary, bay, or coastal area through the exchange of ballast water of vessels prior to entering those waters. Existing law defines "aquatic nuisance" for purposes of these provisions.

This bill would include “transgenic species” within the definition of “aquatic nuisance species.” The bill would define “transgenic,” for this purpose, to describe ~~an~~ *a genetically engineered* organism that has been altered at the molecular or cellular level by one of several specified means.

This bill would permit the department to authorize various entities engaged in scientific or public health research, to import into, possess, produce for noncommercial purposes, or transport within the state, transgenic species, if the department finds that the permitted entity meets or exceeds regulations, including those which require that transgenic fish be contained in a closed system and will not be released into the wild or waters of this state and if the department finds that the organism is not detrimental to the environment, as specified.

The bill would require each permitted entity to notify the department, in writing, within 24 hours, in the event of any unintentional or unauthorized release of a transgenic species covered by a permit or memorandum of understanding.

This bill would authorize the commission to adopt regulations to govern the authorization process described above. The bill would require that these regulations contain certain minimum recording and containment requirements, as specified.

(3) Existing law prohibits the importation into this state of any live aquatic plant or animal by a registered aquaculturist without the prior written approval of the department pursuant to regulations adopted by the Fish and Game Commission.

This bill would prohibit the importation of live transgenic fish, or the roe thereof, by a registered aquaculturist. The bill would define “transgenic” for this purpose to describe ~~an~~ *a genetically engineered* organism that has been altered at the molecular or cellular level by one of several specified means.

(4) Existing law continuously appropriates money in the Fish and Game Preservation Fund to the department and to the commission to pay all necessary expenses incurred in carrying out the Fish and Game Code and to pay the compensation and expenses of the commissioners and employees of the commission.

By imposing new duties on the commission and the department, this bill would make an appropriation.

(5) Existing law makes a violation of the Fish and Game Code, or of any rule, regulation, or order made or adopted under that code, a misdemeanor.



By expanding the scope of crimes, this bill would impose a state-mandated local program.

(6) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: yes. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. Section 2118 of the Fish and Game Code is
2 amended to read:

3 2118. It is unlawful to import, transport, possess, or release
4 alive into this state, except under a revocable, nontransferable
5 permit as provided in this chapter and the regulations pertaining
6 thereto, any terrestrial or aquatic organism or wild animal of the
7 following species:

- 8
- 9 (a) Class Aves: (birds)
- 10 Family Cuculidae (cuckoos)
- 11 All Species.
- 12 Family Alaudidae (larks)
- 13 Skylark, *Alauda arvensis*
- 14 Family Corvidae (crows, jays, magpies)
- 15 All species.
- 16 Family Turdidae (thrushes)
- 17 European blackbird, *Turdus merula*
- 18 Missel (or mistle), thrush, *Turdus Viscivorus*
- 19 Family Sturnidae (starlings and mynas or
- 20 mynahs)
- 21 All species of the family, except hill myna or
- 22 hill mynah),
- 23 *Gracula religiosa* (sometimes referred to as
- 24 *Eulabes religiosa*)
- 25 Family Ploceidae (weavers)
- 26 The following species:
- 27 Spanish sparrow, *Passer hispaniolensis*



- 1 Italian sparrow, *Passer italiae*
- 2 European tree sparrow, *Passer montanus*
- 3 Cape sparrow, *Passer capensis*
- 4 Madagascar weaver, *Foudia*
- 5 *madagascariensis*
- 6 Baya weaver, *Ploceus baya*
- 7 Hawaiian rice bird, *Munia nisororia*
- 8 Red-billed quelea, *Quelea quelea*
- 9 Red-headed quelea, *Quelea erythroptera*
- 10 Family Fringillidae (sparrows, finches, buntings)
- 11 Yellowhammer, *Emberiza citrinella*
- 12 (b) Class Mammalia (mammals)
- 13 Order Primates
- 14 All species, except those in family Homonidae
- 15 Order Edentata (sloths, anteaters, armadillos,
- 16 etc.)
- 17 All species.
- 18 Order Marsupialia (marsupials or pouched
- 19 mammals)
- 20 All species.
- 21 Order Insectivora (shrews, moles, hedgehogs,
- 22 etc.)
- 23 All species.
- 24 Order Dermoptera (gliding lemurs)
- 25 All species.
- 26 Order Chiroptera (bats)
- 27 All species.
- 28 Order Monotremata (spiny anteaters,
- 29 platypuses)
- 30 All species.
- 31 Order Pholidota (pangolins, scaly anteaters)
- 32 All species.
- 33 Order Lagomorpha (pikas, rabbits, hares)
- 34 All species, except domesticated races of
- 35 rabbits.
- 36 Order Rodentia (rodents)
- 37 All species, except domesticated golden
- 38 hamsters, also known as Syrian hamster,
- 39 *Mesocricetus auratus*; domesticated races of



- 1 rats or mice (white or albino; trained,
- 2 dancing or spinning, laboratory-reared); and
- 3 domestic strains of guinea pig (*Cavia*
- 4 *porcellus*).
- 5 Order Carnivora (carnivores)
- 6 All species, except domestic dogs (*Canis*
- 7 *familiaris*) and domestic cats (*Felis catus*).
- 8 Order Tubulidentata (aardvarks)
- 9 All species.
- 10 Order Proboscidea (elephants)
- 11 All species.
- 12 Order Hyracoidea (hyraxes)
- 13 All species.
- 14 Order Sirenia (dugongs, manatees)
- 15 All species.
- 16 Order Perissodactyla (horses, zebras, tapirs,
- 17 rhinoceroses, etc.)
- 18 All species, except those of the family Equidae.
- 19 Order Artiodactyla (swine, peccaries, camels,
- 20 deer, elk, except elk (genus *Cervus*) which are
- 21 subject to Section 2118.2, moose, antelopes,
- 22 cattle, goats, sheep, etc.)
- 23 All species except: domestic swine of the family
- 24 Suidae; American bison, and domestic cattle,
- 25 sheep and goats of the family Bovidae; races
- 26 of big-horned sheep (*Ovis canadensis*) now
- 27 or formerly indigenous to this state.
- 28 Mammals of the orders Primates, Edentata,
- 29 Dermoptera, Monotremata, Pholidota, Tubulidentata,
- 30 Proboscidea, Perissodactyla, Hyracoidea, Sirenia and
- 31 Carnivora are restricted for the welfare of the animals,
- 32 except animals of the families Viverridae and Mustelidae
- 33 in the order Carnivora are restricted because ~~such~~ *those*
- 34 animals are undesirable and a menace to native wildlife,
- 35 the agricultural interests of the state, or to the public
- 36 health or safety.
- 37 (c) Class amphibia (frogs, toads, salamanders)
- 38 Family Bufonidae (toads)
- 39 Giant toad or marine toad, *Bufo marinus*
- 40 (d) Class Monorhina (lampreys)



- 1 All species.
- 2 (e) Class Osteichthyes (bony fishes)
- 3 Family Serranidae (bass)
- 4 White perch, *Morone* or *Roccus americana*
- 5 Family Clupeidae (herring)
- 6 Gizzard shad, *Dorosoma cepedianum*
- 7 Family Sciaenidae (croakers)
- 8 Freshwater sheepshead, *Aplodinotus*
- 9 *grunniens*
- 10 Family Characidae (characins)
- 11 Banded tetra, *Astyanax fasciatus*
- 12 All species of piranhas
- 13 Family Lepisosteidae (gars)
- 14 All species.
- 15 Family Amiidae (bowfins)
- 16 All species.
- 17 (f) Class Reptilia (snakes, lizards, turtles, alligators)
- 18 Family Crocodylidae
- 19 All species.
- 20 (g) Class Crustacea (crustaceans)
- 21 Genus *Cambarus* (crayfishes)
- 22 All species.
- 23 Genus *Astacus* (crayfishes)
- 24 All species.
- 25 Genus *Astacopsis* (crayfishes)
- 26 All species.
- 27 (h) Class Gastropoda (slugs, snails, clams)
- 28 All species of slugs.
- 29 All species of land snails.
- 30 (i) Other classes, orders, families, genera, and species
- 31 of wild animals which may be designated by the
- 32 commission in cooperation with the Department of Food
- 33 and Agriculture, (1) when the class, order, family, genus,
- 34 or species is proven to be undesirable and a menace to
- 35 native wildlife or the agricultural interests of the state, or
- 36 (2) to provide for the welfare of wild animals.
- 37 (j) Except as expressly authorized in this code, any live
- 38 nonindigenous Atlantic salmon or the roe thereof into the
- 39 Smith River watershed.



1 (k) Any live transgenic fish, or the roe thereof, including,
2 but not limited to, transgenic salmon or the roe thereof.
3 “Transgenic fish,” for purposes of this subdivision, means
4 a *genetically engineered* fish that has been altered at the molecular
5 or cellular level by means that are not possible under natural
6 conditions or processes, including, but not limited to, recombinant DNA
7 and RNA techniques, ~~cell fusion~~, gene deletion and doubling, introducing
8 foreign gene, or changing the position of the gene, but excluding
9 ~~chromosome manipulation for the sole purpose of sterilization or creation~~
10 ~~of triploid fish. ploidy manipulations used for sterilization, and fish~~
11 ~~produced by matings between closely related species, as in traditional~~
12 ~~hybridization.~~

13 (l) Classes, families, genera, and species in addition to
14 those listed in this section may be added to or deleted
15 from the above lists from time to time by commission
16 regulations in cooperation with the Department of Food
17 and Agriculture.

18
19 SEC. 2. Section 6431 of the Fish and Game Code is amended
20 to read:

21 6431. (a) “Aquatic nuisance species” means a
22 nonindigenous or transgenic species that threatens the viability or
23 abundance of a native species, the ecological stability of waters
24 inhabited by those species, or the viability of commercial,
25 agricultural, aquacultural, or recreational activities which depend
26 on those waters.

27 (b) “Transgenic,” for purposes of this section, describes ~~an~~ a
28 *genetically engineered* organism that has been altered at the
29 molecular or cellular level by means that are not possible under
30 natural conditions or processes, including, but not limited to,
31 recombinant DNA and RNA techniques, ~~cell fusion~~, gene deletion
32 and doubling, introducing a foreign gene, or changing the position
33 of the gene, but ~~excluding chromosome manipulation for the sole~~
34 ~~purpose of sterilization or creation of triploid fish. excluding~~
35 ~~ploidy manipulations used for sterilization, and fish produced by~~
36 ~~matings between closely related species, as in traditional~~
37 ~~hybridization.~~

38 SEC. 3. Section 6431.5 is added to the Fish and Game Code,
39 to read:



1 6431.5. (a) Subject to regulations adopted by the
2 commission pursuant to subdivision (b), the department may,
3 through permits or memorandums of understanding, authorize a
4 university, college, governmental research agency, other bona fide
5 scientific institution, or private research firm, as determined by the
6 department, engaging in scientific or public health research, to
7 import into, possess, produce for noncommercial purposes, or
8 transport within this state, a transgenic species designated in, or
9 enumerated pursuant to, Section 2118 or 6431, if the department
10 finds both of the following:

11 (1) The permitted entity meets or exceeds the regulations
12 adopted by the commission pursuant to subdivision (b), including,
13 but not limited to, provisions requiring that the transgenic fish be
14 contained in a closed system and will not be released into the wild
15 or waters of the state.

16 (2) The transgenic fish is not detrimental or that no damage or
17 detriment can be caused to agriculture, ocean ecosystems, native
18 fish and wildlife, or to public health or safety.

19 (b) The commission may adopt regulations governing permits
20 or memorandums of understanding authorizing transgenic species
21 to be imported into, possessed, produced for noncommercial
22 purposes, or transported within the state pursuant to subdivision
23 (a). At a minimum, the regulations shall require that transgenic
24 fish be contained in closed systems and that adequate records,
25 including the species name and number of transgenic fish that are
26 to be utilized for these research purposes, are maintained and made
27 available for inspection by the department.

28 (c) Any permitted entity shall notify the department in writing,
29 within 24 hours, in the event of any unintentional or unauthorized
30 release of a transgenic species covered by a permit or
31 memorandum of understanding pursuant to this section.

32 SEC. 4. Section 15600 of the Fish and Game Code is amended
33 to read:

34 15600. (a) No live transgenic fish, or the roe thereof,
35 including, but not limited to, transgenic salmon or the roe thereof,
36 may be imported into this state by a registered aquaculturist.
37 “Transgenic,” for purposes of this subdivision, describes ~~an~~ a
38 *genetically engineered* organism that has been altered at the
39 molecular or cellular level by means that are not possible under
40 natural conditions or processes, including, but not limited to,



1 recombinant DNA and RNA techniques, ~~cell fusion~~, gene deletion
2 and doubling, introducing a foreign gene, or changing the position
3 of the gene, but ~~excluding chromosome manipulation for the sole~~
4 ~~purpose of sterilization or creation of triploid fish.~~ *excluding*
5 *ploidy manipulations used for sterilization, and fish produced by*
6 *matings between closely related species, as in traditional*
7 *hybridization.*

8 (b) No live aquatic plant or animal may be imported into this
9 state by a registered aquaculturist without the prior written
10 approval of the department pursuant to the regulations adopted by
11 the commission.

12 (c) The department shall not approve the importation of, or
13 renew a permit to import, any anadromous fish or roe thereof listed
14 in Section 2118 or the regulations adopted under Section 2118 into
15 the Smith River watershed by a person unless that person had a
16 permit or authorization approved before February 22, 1988.
17 However, the department may issue or renew a permit for the
18 importation of any anadromous fish or roe thereof specifically for
19 research purposes conducted at any university, college,
20 governmental research agency, or other bona fide scientific
21 institution, as determined by the department, engaging in scientific
22 or public health research.

23 SEC. 5. No reimbursement is required by this act pursuant to
24 Section 6 of Article XIII B of the California Constitution because
25 the only costs that may be incurred by a local agency or school
26 district will be incurred because this act creates a new crime or
27 infraction, eliminates a crime or infraction, or changes the penalty
28 for a crime or infraction, within the meaning of Section 17556 of
29 the Government Code, or changes the definition of a crime within
30 the meaning of Section 6 of Article XIII B of the California
31 Constitution.

